REMARKS

The Office Action mailed April 10, 2008, has been received and reviewed. Claim 39 has been cancelled. Claims 10-38 and 40-45 are currently pending in the application. Claims 10-45 stand rejected. Applicant has amended claims 19, 35, 38, 40 and 41, and respectfully requests reconsideration of the application as amended herein.

Claim Rejections under 35 U.S.C. § 112

Claim 38 is rejected under 35 U.S.C. § 112, first paragraph, as being a single element means claim, and therefore being unduly broad.

Applicant has amended claim 38 to include the additional claim element of claim 39, now cancelled. Accordingly, Applicant respectfully requests the rejection be withdrawn.

Claim Rejections under 35 U.S.C. § 103

Claims 10-30

Claims 10-30 were rejected as being unpatentable over U.S. Patent No. 6,175,550 to van Nee ("van Nee") in view of "Overview of Multicarrier CDMA," IEEE Comm. Mag., Dec. 1997, at 126 to Hara et al. ("Hara") and further in view of Applicant's Admitted Prior Art ("AAPA") and further in view of U.S. Patent No. 6,810,030 to Kuo ("Kuo") and further in view of U.S. Patent No. 6,606,311 to Wang et al. ("Wang"). Applicant respectfully traverses this rejection, as hereinafter set forth.

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* MPEP § 2143.03. Additionally, there must be "a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the

nature of the problem itself, and not based on the Applicant's disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of claims 10-30 are improper because the elements for a prima facie case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art reference must teach or suggest all the claims limitations.

Applicant's independent claims 10, 17, 20 and 29, from which claims 11-16, 18, 19, 21-28 and 30 depend, each recite, in part, *"a plurality of forward link frequency bins are allocated to carry* ***different types of payload data"*** which is not taught or suggested in either van Nee, Hara, AAPA, Kuo or Wang.

The Office Action concedes:

> ***Van Nee*** in view of ***Hara*** in further view of ***Applicant's admitted prior art*** in further view of ***Kuo does not expressly disclose*** allocating the plurality of ***forward link frequency bins to carry different types of data***. (Office Action, p. 7; emphasis added.)

The Office Action then attempts to augment the above-references' lack of teaching by citing to Wang which teaches an architecture for providing multiple levels of ***data quality standards***, and not the missing teaching of ***allocating the plurality of forward link frequency bins to carry different types of data***, as claimed by Applicant. Furthermore, while the Office Action pieces together various Quality of Service (QoS) teachings from Wang, these citations clearly do not provide the lack of teaching in the other references of Applicant's ***allocating the plurality of forward link frequency bins to carry different types of data***. Specifically, the Office Action points out arbitrary QoS teachings of Wang, namely:

> Wang teaches, in a CDMA system using multiple carriers (col. 2, lines 32-45, wherein cdma2000 is a multi-carrier system), determining the quality of service (QoS) requirements of a given information stream (col. 4, lines 36-41) and then ***forwarding the information stream over an assigned set of physical channels having the QoS capabilities required by the information stream*** (col. 4, lines 47-52, see also col. 5, lines 27-32), where it is implicit that each carrier in the multi-carrier system constitutes a set of physical channels having particular QoS capabilities. Wang does this in order to have a system that supports multiple defined QoS classes (col. 3, lines 10-14). (Office Action, p. 7; emphasis added.)

While Wang may teach of a system that supports multiple QoS classes, a QoS class defines a level of quality (e.g., error rate, delay, etc.) of data traversing a link. Such teachings clearly do not teach the other references' missing element as presently claimed by Applicant, namely, *"a plurality of forward link frequency bins are allocated to carry* ***different types of payload data"***.

Therefore, since at least Applicant's claim element of *"a plurality of forward link frequency bins are allocated to carry* ***different types of payload data"*** is not taught or suggested in the cited references, either individually or in any proper combination, these cited references **cannot** render obvious under 35 U.S.C. §103 Applicant's invention as presently claimed.

Accordingly, since neither van Nee, Hara, AAPA, Kuo nor Wang, either individually or in any proper combination, teach or suggest **all** of the claim limitations of Applicant's invention as recited in independent claims 10, 17, 20 and 29, from which claims 11-16, 18, 19, 21-28 and 30 depend, van Nee, Hara, AAPA, Kuo or Wang **cannot** render obvious under 35 U.S.C. § 103 Applicant's invention as claimed. Therefore, Applicant respectfully requests that such rejections be withdrawn.

Regarding dependent claims 11-16, 18, 19, 21-28 and 30, the nonobviousness of an independent claim precludes a rejection of claims which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claims 10, 17, 20 and claims 11-16, 18, 19, 21-28 and 30 which depend therefrom.

Claims 31-45

Claims 31-45 were rejected as being unpatentable over U.S. Patent No. 6,175,550 to van Nee ("van Nee") in view of U.S. Patent No. 6,810,030 to Kuo ("Kuo") and further in view of U.S. Patent No. 6,606,311 to Wang et al. ("Wang"). Applicant respectfully traverses this rejection, as hereinafter set forth.

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* MPEP § 2143.03. Additionally, there must be "a reason that would have

prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant's disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of claims 31-45 are improper because the elements for a prima facie case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art reference must teach or suggest all the claims limitations.

Applicant's independent claims 31, 33, 36, 38, 41 and 43, from which claims 32, 34, 35, 37, 40, 42, 44 and 45 depend (claim 39 being cancelled herein), each recite, in part, *"a plurality of forward link frequency bins allocated to carry* ***different types of payload data"*** which is not taught or suggested in either van Nee or Kuo or Wang.

The Office Action concedes:

> ***Van Nee*** in view of ***Kuo does not expressly disclose*** allocating the plurality of ***forward link frequency bins to carry different types of data***. (Office Action, pp. 14 and 16; emphasis added.)

As stated above, the Office Action then attempts to augment the above-references' lack of teaching by citing to Wang which teaches an architecture for providing multiple levels of ***data quality standards***, and not the missing teaching of ***allocating the plurality of forward link frequency bins to carry different types of data***, as claimed by Applicant. Furthermore, while the Office Action pieces together various Quality of Service (QoS) teachings from Wang, these citations clearly do not provide the lack of teaching in the other references of Applicant's ***allocating the plurality of forward link frequency bins to carry different types of data***. Specifically, the Office Action points out arbitrary QoS teachings of Wang, namely:

> Wang teaches, in a CDMA system using multiple carriers (col. 2, lines 32-45, wherein cdma2000 is a multi-carrier system), determining the quality of service (QoS)

> requirements of a given information stream (col. 4, lines 36-41) and then ***forwarding the information stream over an assigned set of physical channels having the QoS capabilities required by the information stream*** (col. 4, lines 47-52, see also col. 5, lines 27-32), where it is implicit that each carrier in the multi-carrier system constitutes a set of physical channels having particular QoS capabilities. Wang does this in order to have a system that supports multiple defined QoS classes (col. 3, lines 10-14). (Office Action, pp. 14-15 and 16-17; emphasis added.)

Applicant herein sustains the above-proffered arguments, namely, that while Wang may teach of a system that supports multiple QoS classes, a QoS class defines a level of quality (e.g., error rate, delay, etc.) of data traversing a link. Such teachings clearly do not teach the other references' missing element as presently claimed by Applicant, namely, *"a plurality of forward link frequency bins are allocated to carry* ***different types of payload data"***.

Therefore, since at least Applicant's claim element of *"a plurality of forward link frequency bins are allocated to carry* ***different types of payload data"*** is not taught or suggested in the cited references, either individually or in any proper combination, these cited references **cannot** render obvious under 35 U.S.C. §103 Applicant's invention as presently claimed.

Accordingly, since neither van Nee, Kuo nor Wang, either individually or in any proper combination, teach or suggest **all** of the claim limitations of Applicant's invention as recited in independent claims 31, 33, 36, 38, 41 and 43, from which claims 32, 34, 35, 37, 40, 42, 44 and 45 depend (claim 39 being cancelled herein), van Nee, Kuo or Wang **cannot** render obvious under 35 U.S.C. § 103 Applicant's invention as claimed. Therefore, Applicant respectfully requests that such rejections be withdrawn.

Regarding dependent claims 32, 34, 35, 37, 40, 42, 44 and 45, the nonobviousness of an independent claim precludes a rejection of claims which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claims 31, 33, 36, 38, 41 and 43 and claims 32, 34, 35, 37, 40, 42, 44 and 45 which depend therefrom.

CONCLUSION

Claims 10-38 and 40-45 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicant's undersigned representative.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated July 10, 2008
:

By: /Rupit Patel/

Rupit Patel, Reg. No. 53,441
(858) 651-7435

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 658-5787
Facsimile: (858) 658-2502